

A B S T R A C T

The present invention concerns a process for treating a fiber or a fiber-based material such as a yarn, a woven, knitted or nonwoven textile material, paper, or leather, to improve its adsorption properties, wherein the following successive operations are carried out on said fiber or said material:

- a) applying a solid mixture of cyclodextrin(s) and/or cyclodextrin derivative(s) and/or inclusion complex(es) of cyclodextrin and/or cyclodextrin derivatives, at least one poly(carboxylic) acid and/or at least one poly(carboxylic) acid anhydride and optionally a catalyst;
- b) heating to a temperature in the range 150°C to 220°C;
- c) washing with water; and
- d) drying.

The present invention also concerns fibers or fiber-based materials with improved cation exchange properties and improved hydrophilic characteristics.